



# **TBR SERIES**

Recessed Steel Housing
6V up to 81W, 12V up to 110W, 24V up to 110W Capacities
Lead-Calcium or Nickel-Cadmium battery

### **FEATURES**

#### Housing

- 20 gauge steel housing designed for easy access to internal components
- Corrosion-resistant baked enamel mist white finish standard, black optional
- Provision for mounting up to 3 lighting heads
- Various choices of lighting head styles and lamp types

# Mounting

Recessed T-Bar ceiling mount; lay-in installation for grid ceiling only

#### **Electronics**

- Automatic, temperature-compensated, pulse-type charger
- High capacity, automatic, dust-tight instantaneous transfer relay
- Low voltage disconnect prevents over discharge of battery
- Automatic brownout protection
- Battery lock-out prevents battery discharge during installation
- Fused output circuit

#### Improved Diagnostics option

 Units equipped with Improved Diagnostics shall self-test, by simulating a power failure, in accordance with NFPA101, Life Safety Code one minute monthly, 30 minutes every six months and 90 minutes annually. For complete information refer to page 8.

## **NEXUS®** option

• Units equipped with NEXUS® self-testing monitoring system circuitry shall self-test, in accordance with NFPA101 Life Safety Code for a minimum of 30 seconds monthly, 30 minutes every six months and 90 minutes annually as well as keep a history of all testing logs, plus feature real-time diagnoses, and provide the exact fixture location while notifying service personnel of the status of the fixture via email. For complete information refer to page 4-5.

### **Controls**

- Red charger monitor LED indicates charging of the battery
- Amber AC-ON LED indicates AC power is on
- Momentary test switch allows for quick operational check of entire system

# **Choice of Sealed Maintenance-Free Battery**

- 6V, 12 or 24V Lead-Calcium battery
- 6V, 12 or 24V Nickel-Cadmium battery

# **Approval**

UL 924 Listed

## Warranty (subject to proper installation and maintenance)

- Unit has a three year full warranty (excluding lamps and fuses)<sup>1</sup>
- Lead-Calcium battery has a three year full, plus three year pro-rata warranty
- Nickel-Cadmium battery has a five year full, plus five year pro-rata warranty

### **HEAD STYLE WITH LAMP TYPE CHOICES**

LAMP TYPE	HEAD STYLE					
	<b>ELF645</b> (pg.108)	<b>ELF2</b> (pg.105)	<b>ELF3</b> (pg.106)	<b>DR1130</b> (pg.104)		
Wedge Based Incandescent	Х	Х				
Bi-Pin Halogen	Х	Х				
PAR36 Sealed Beam Incandescent	Х					
PAR36 Sealed Beam Halogen	Х					
MR16 Halogen			Х	Х		
MR16 LED			Х	Х		

## **ACCESSORIES** (Order as a separate item)

Remote Test Switch (Metal Faceplate)	PSW
Remote Test Switch (Plastic Faceplate)	PSW1

### **SPECIFICATIONS**

Supply and install Lightalarms® TBR Series.

The emergency lighting unit shall be a self-contained fixture including a sealed maintenance-free Lead-Calcium or Nickel-Cadmium battery of 6V, 12V or 24V of wattage as specified on the unit rating chart. The unit shall supply the rated wattage load for a minimum of 90 minutes to 87-1/2% of rated battery voltage. The unit shall be rated 120/277VAC, 60Hz and be UL 924 listed.

The unit charger shall utilize an integrated circuit which samples the battery in relation to temperature, state of charge and input voltage fluctuations. The charger shall be current limited, temperature compensated, short-circuit protected and reverse polarity protected. The unit shall be furnished with an electronic lockout circuit which will connect the battery when the AC circuit is activated, and an electronic brownout circuit which will activate the unit when utility power dips below 80-85% of nominal voltage. A low voltage battery protection circuit shall be provided and will disconnect the load and circuitry from the battery when it reaches 87-1/2% of its nominal voltage. The unit shall be capable of full recharge in compliance with UL924 specifications. The unit shall be furnished with sealed dust-tight relay, a test switch and dual diagnostic LED indicator lights (hi-charge and AC pilot). The housing shall be 20 gauge steel, designed for provision for mounting up to 3 heads, T-Bar ceiling grid installation and for easy access to internal components.

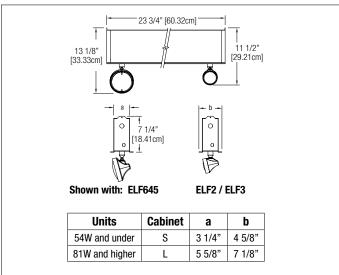
Units specified with Improved Diagnostics (audible or non-audible) will continuously monitor every critical function of the unit including the attached remote lighting heads and/or attached AC/DC Exit Signs. Operational status of the battery, charger and lamps are indicated by individual LED status indicators. Once a malfunction is detected, if audible, a high-pitch audible alarm will sound, and the appropriate LED status indicator will illuminate alerting of the unit malfunction. If non-audible, only the LED status indicator will illuminate alerting of the unit malfunction. The microcontroller shall automatically self-test, by simulating a power failure, in accordance with NFPA101 Life Safety Code for one minute monthly, 30 minutes every six months and 90 minutes annually

Every **TBR** Series unit shall be fully warranted for three years, subject to proper installation and maintenance.

Unit shall be Lightalarms® catalog number\_\_\_\_\_

#### **DIMENSIONS**

Dimensions are approximate and subject to change.





<sup>&</sup>lt;sup>1</sup> For LED lamps warranty, refer to page 168 paragraph 3.2

TYPE		_
CATALOG #		_
		_
NOTES		_









Designed for unobtrusive use in T-Bar ceilings. The off-white, fully recessed housing harmonizes with ceiling designs











# **POWER CONSUMPTION / UNIT RATING CHART**

Available Head Style Choices:	ELF645
Head Style Suffix:	/Blank

/D1

SERIES	DC SPECS				AC SPECS			
	BATTERY TYPE DC	DC VOLTAGE	87.5% I	87.5% BATTERY CAPACITY (IN WATTS) <sup>1</sup>			UNITS DUAL VOLTAGE <sup>2</sup>	CURRENT MAXIMUM
	DAITENT TIPE	DG VOLIAGE	90 MIN.	2 HRS.	3 HRS.	4 HRS.	UNITS DUAL VULIAGE	CONNENT WAXIWOW
TBRCO	Lead-Calcium	6V	18	12	0	0		
TBRC1		6V	27	18	14	10		
TBRC5		6V	36	25	20	14		
TBRC2		6V	54	37	28	21		
TBRC3		6V	81	54	42	30		
T12BRC0		12V	54	37	28	21	120VAC	0.3A
T12BRC1	Nickel-Cadmium (with option-N)	12V	110	72	56	40	277VAC	0.15A
T24BRC1		24V	110	72	56	40		
TRBC1		6V	18	12	0	0		
TRBC2		6V	25	18	12	9		
T12BRC1		12V	36	21	15	12		
T12BRC2		12V	50	36	25	18		

National Electrical Code Specification
 All units 120/277 dual voltage, information based on wiring to specific voltage type

# ORDERING FORMAT

# OF HEADS	SERIES/BATTERY/CAPACITY	HEAD STYLE	LAMP TYPE	OPTIONS
# OF HEADS  Ilank= No heads = 1 head = 2 heads = 3 heads	SERIES/BATTERY/CAPACITY  Lead-Calcium Battery  TBRC1= 6V-18W  TBRC5= 6V-36W  TBRC2= 6V-54W  TBRC3= 6V-81W  T12BRC0= 12V-36W  T12BRC1= 12V-110W  T24BRC1= 24V-110W  For Nickel-Cadmium Battery (MUST INCLUDE OPTION -N)  TRBC1= 6V-18W  TRBC2= 6V-25W  T12BRC1= 12V-36W  T12BRC2= 12V-50W	HEAD STYLE  /Blank= ELF645 (PAR36, Plastic) /ELF2= ELF2 (PAR18, Plastic) LED /E3= ELF3 (MR16, Plastic) /D1= DR1130 (MR16, Metal)	Add lamp suffix to indicate lamp type, voltage and wattage.  For available Lamp Types within a specified Head Style refer to that Head Style page for proper lamp suffix with Blank (ELF645), page 108 with ELF2, page 106 with DR1130, page 104  Lamp Type MUST:  1) Match battery voltage 2) Total of all lamps wattage must not exceed battery watt capacity for 90 min.  3) Sealed Beams not compatible with Nickel-Cadmium battery	Blank= Mist White housing, No Options -B= Black Housing -ID= Improved Diagnostics (audible)¹ -IDNA= Improved Diagnostics (non audible)¹ -NEX= Nexus® Wired Compatible² -NEXRF= Nexus® Wireless Compatible² -TD5= Time Delay (5 minutes) -TD10= Time Delay (10 minutes) -TD15= Time Delay (15 minutes) -A= Ammeter³ -V= Voltmeter³ -N= Nickel-Cadmium battery
				I-ID & -IDNA include a time delay feature that can be enabled/disabled in the field or set by the factory by including -ID-TD* or -IDNA-TD*     -NEX & -NEXRF is CSA-US approved only. Consult yo sales representative

**EXAMPLE: 2TBRC1/L9-V** 

